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EXAMINER	
MISTRY, O NEAL RAJAN	
ART UNIT	**PAPER NUMBER**
2173	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/021,728	FULLER ET AL.	
	Examiner	Art Unit	
	O'Neal R Mistry	2173	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 December 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-37* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-37* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12 December 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This application has been examined.

2. Claims 1-37 are presented for examination.

Drawings

3. The Examiner contends that the drawings submitted on December 12, 2001 are acceptable for the examination proceedings.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim1-10, 17-26, & 31-35 are rejected under 35 U.S.C. 102(b) as being anticipated by Sojoodi et al (U.S. Patent number 5,784,275).

5. In regards to claim 1, Sojoodi discloses a computer-implemented method for creating a graphical program, the method comprising:

receiving user input specifying one or more nodes to include in the graphical program (col. 11 lines 59-67). [Referring ahead briefly to FIG. 6, a screen shot of a graphical programming environment, according the present invention, including a VISA virtual instrument exemplary of the VI 50 of FIG. 3 is shown. The screen shot of FIG. 6 comprises an instrument front panel in a window in the upper portion of the screen and a block diagram in a window in

the lower portion of the screen. The block diagram comprises program execution elements, referred to as nodes, which are wired together to produce a dataflow program.]. The examiner interprets that in Figure 6 that the user has the ability to inserting the block element on to the screen, instead of programming the code. The user will put a sequence of blocks to together as demonstrated in the Figure 6, which are connected by wires, that will produce a graphical program.;

including the one or more specified nodes in the graphical program (col. 11 lines 59-67). [Referring ahead briefly to FIG. 6, a screen shot of a graphical programming environment, according the present invention, including a VISA virtual instrument exemplary of the VI 50 of FIG. 3 is shown. The screen shot of FIG. 6 comprises an instrument front panel in a window in the upper portion of the screen and a block diagram in a window in the lower portion of the screen. The block diagram comprises program execution elements, referred to as nodes, which are wired together to produce a dataflow program.]. In Figure 6 there are multiple blocks which are connected together that are specified nodes with labels above the nodes; and

providing one or more suggested nodes to include in the graphical program, based on the one or more nodes specified by the user input (col. 16 line 64 – col. 17 line 2) [Referring now to FIG. 7, a screen shot including a help screen illustrating the terminals of a VISA Write function node

is shown. The VISA write node is illustrative of most VISA function nodes in that it has a VISA session input terminal, a dup VISA session output terminal, an error in input terminal, and an error out output terminal.]. The examiner interprets that providing a suggestion node in a help screen in a graphical program, the help screen contains information of the node's data input/output, after review, the examiner interprets that this form of a suggestion to aid the user in developing a graphical program.

6. In regards to claim 2, Sojoodi states the graphical program comprises a block diagram portion and a user interface portion (col. 11 lines 59-67) [Referring ahead briefly to FIG. 6, a screen shot of a graphical programming environment, according the present invention, including a VISA virtual instrument exemplary of the VI 50 of FIG. 3 is shown. The screen shot of FIG. 6 comprises an instrument front panel in a window in the upper portion of the screen and a block diagram in a window in the lower portion of the screen. The block diagram comprises program execution elements, referred to as nodes, which are wired together to produce a dataflow program.].

7. In regards to claim 3, Sojoodi discloses the graphical program comprises a graphical data flow program (col. 11 lines 59-67) [Referring ahead briefly to FIG. 6, a screen shot of a graphical programming environment, according the present invention, including a VISA virtual instrument exemplary of the VI 50 of FIG. 3 is shown. The

screen shot of FIG. 6 comprises an instrument front panel in a window in the upper portion of the screen and a block diagram in a window in the lower portion of the screen. The block diagram comprises program execution elements, referred to as nodes, which are wired together to produce a dataflow program.]. In Figure 6, Sojoodi illustrates descriptive title over the nodes to notify the user the purpose and function of the node.

8. In regards to claim 4, Sojoodi states interconnecting nodes included in the graphical program to visually indicate functionality of the graphical program (col. 11 lines 59-67) [Referring ahead briefly to FIG. 6, a screen shot of a graphical programming environment, according the present invention, including a VISA virtual instrument exemplary of the VI 50 of FIG. 3 is shown. The screen shot of FIG. 6 comprises an instrument front panel in a window in the upper portion of the screen and a block diagram in a window in the lower portion of the screen. The block diagram comprises program execution elements, referred to as nodes, which are wired together to produce a dataflow program.]. In Figure 6, Sojoodi illustrates the interconnecting nodes to allow the user to visual identify the functionality of the graphical program.

9. In regards to claim 5, Sojoodi discloses providing the one or more suggested nodes comprises displaying the one or more suggested nodes (col. 16 line 64 – col. 17 line 2) [Referring now to FIG. 7, a screen shot including a help

screen illustrating the terminals of a VISA Write function node is shown. The VISA write node is illustrative of most VISA function nodes in that it has a VISA session input terminal, a dup VISA session output terminal, an error in input terminal, and an error out output terminal.]. The examiner interprets that providing a suggestion node in a help screen in a graphical program, the help screen contains information of the node's data input/output, after review, the examiner interprets that this form of a suggestion to aid the user in developing a graphical program.

10. In regards to claim 6, Sojoodi states displaying the one or more suggested nodes comprises displaying the one or more suggested nodes on a suggestion palette. (col. 8 lines 59-61) [FIG. 7 is a screen shot illustrating the VISA functions palette including a help window illustrating the terminals of an exemplary VISA function node;].

11. In regards to claim 7, Sojoodi discloses displaying the one or more suggested nodes comprises displaying the one or more suggested nodes as shadow nodes that follow a mouse cursor (col. 17 lines 27-33) [Referring now to FIG. 8, a flowchart illustrating steps taken to create and use a VISA virtual instrument are shown. A programmer "drags" a VISA session control from the Path and Refnum palette, as shown in FIG. 9a, and "drops" the control in a virtual instrument front panel. This "drag" and "drop" operation is performed by the

user using a mouse or other pointing device, as is well known in the art.].

12. In regards to claim 8, Sojoodi discloses:

receiving user input requesting to include a first suggested node in the graphical program (col. 17 lines 27-33 & Figure 7) [Referring now to FIG. 8, a flowchart illustrating steps taken to create and use a VISA virtual instrument are shown. A programmer "drags" a VISA session control from the Path and Refnum palette, as shown in FIG. 9a, and "drops" the control in a virtual instrument front panel. This "drag" and "drop" operation is performed by the user using a mouse or other pointing device, as is well known in the art.]. The examiner interrupts that in the Figure 8 the user implements a drag and drop into the front panel of the graphical program, which is receiving the user input, and if the user needs assistants, Figure 7 illustrates a help palette, a help window is available for reference.

including the first suggested node in the graphical program (col. 16 line 64 – col. 17 line 2) [Referring now to FIG. 7, a screen shot including a help screen illustrating the terminals of a VISA Write function node is shown. The VISA write node is illustrative of most VISA function nodes in that it has a VISA session input terminal, a dup VISA session output terminal, an error in input terminal, and an error out output terminal.]. The examiner interprets that providing a

suggestion node in a help screen in a graphical program, the help screen contains information of the node's data input/output, after review, the examiner interprets that this form of a suggestion to aid the user in developing a graphical program

13. In regards to claim 9, Sojoodi states automatically including the one or more suggested nodes in the graphical program (col. 16 line 64 – col. 17 line 2 & col. 9 lines 26-27) [Referring now to FIG. 7, a screen shot including a help screen illustrating the terminals of a VISA Write function node is shown. The VISA write node is illustrative of most VISA function nodes in that it has a VISA session input terminal, a dup VISA session output terminal, an error in input terminal, and an error out output terminal.] [FIGS. 27-29 are screen shots illustrating various aspects of the VISA attribute node of FIG. 3]. The examiner interprets claim 9 by the graphical program having the ability to automatically find correct node for the user to program. In Sojoodi's patent, the user has the ability to active the help window, and when the help window is activated the program automatically finds the correct node for suggestion to aide the user in program.

14. In regards to claim 10, Sojoodi discloses determining the one or more suggested nodes (col. 16 line 64 – col. 17 line 2) [Referring now to FIG. 7, a screen shot including a help screen illustrating the terminals of a VISA Write function node is shown. The VISA write node is illustrative of most VISA function nodes in that it has a VISA session input terminal, a dup VISA session output terminal, an

error in input terminal, and an error out output terminal.]. The examiner interprets that providing a suggestion node in a help screen in a graphical program, the help screen contains information of the node's data input/output, after review, the examiner interprets that this form of a suggestion to aid the user in developing a graphical program.

15. In regards to claim 17, Sojoodi states:

receiving user input specifying suggestion criteria (col. 17 lines 27-33 & Figure 7) [Referring now to FIG. 8, a flowchart illustrating steps taken to create and use a VISA virtual instrument are shown. A programmer "drags" a VISA session control from the Path and Refnum palette, as shown in FIG. 9a, and "drops" the control in a virtual instrument front panel. This "drag" and "drop" operation is performed by the user using a mouse or other pointing device, as is well known in the art.]. The examiner interrupts that in the Figure 8 the user implements a drag and drop into the front panel of the graphical program, which is receiving the user input, and if the user needs assistants, Figure 7 illustrates a help palette, a help window is available for reference);

determining the one or more suggested nodes based on the one or more nodes specified by the user input and based on the suggestion criteria (col. 27 lines 24-28) [The help window of FIG. 27 shows the terminals of a VISA attribute node. The VISA attribute node comprises a terminal for each of the attributes of the node. Some attributes are

read-only and some attributes are both readable and writable.]. The examiner interprets the second limitation of claim 17, that the node the user is requiring assistant could be determined by the information processing system. In the Sojoodi's patent the user has the ability of invoking the help window for a specific node, which in illustrated Figure 27 & Figure 7 for two different nodes.

16. In regards to claim 18, Sojoodi states the graphical program is operable to perform an industrial automation function and a process control function (col. 8 lines 40-44) [FIG. 1 illustrates an instrumentation control system according to the present invention; FIG. 1a illustrates an instrumentation control system similar to that of FIG. 1 comprising further instrument types;]. The examiner interprets that a instrumentation control system is used for automation functions.

17. In regards to claim 31, Sojoodi discloses a system for creating a graphical program, the system comprising:

a memory medium storing program instructions (Figure 2 item 28 & 30);

a processor (Figure 2 item 24);

wherein the processor is operable to execute the program instructions to:

receive user input specifying one or more nodes to include in a graphical program (col. 11 lines 59-67). [Referring ahead briefly to FIG. 6, a screen shot of a graphical programming environment, according the present invention, including a VISA virtual instrument exemplary of the VI 50 of FIG. 3 is shown. The

screen shot of FIG. 6 comprises an instrument front panel in a window in the upper portion of the screen and a block diagram in a window in the lower portion of the screen. The block diagram comprises program execution elements, referred to as nodes, which are wired together to produce a dataflow program.]. The examiner interprets that in Figure 6 that the user has the ability to inserting the block element on to the screen, instead of programming the code. The user will put a sequence of blocks to together as demonstrated in the Figure 6, which are connected by wires, that will produce a graphical program;

include the one or more specified nodes in the graphical program program (col. 11 lines 59-67). [Referring ahead briefly to FIG. 6, a screen shot of a graphical programming environment, according the present invention, including a VISA virtual instrument exemplary of the VI 50 of FIG. 3 is shown. The screen shot of FIG. 6 comprises an instrument front panel in a window in the upper portion of the screen and a block diagram in a window in the lower portion of the screen. The block diagram comprises program execution elements, referred to as nodes, which are wired together to produce a dataflow program.]. In Figure 6 there are multiple blocks which are connected together with specified nodes with labels above the nodes; and

display one or more suggested nodes to include in the graphical program, based on the one or more nodes specified by the user input (col. 16 line 64 – col. 17 line 2) [Referring now to FIG. 7, a screen shot including a help screen illustrating the terminals of a VISA Write function node is shown. The VISA write node is illustrative of most VISA function nodes in that it has a VISA session input terminal, a dup VISA session output terminal, an error in input terminal, and an error out output terminal.]. The examiner interprets that providing a suggestion node in a help screen in a graphical program, the help screen contains information of the node's data input/output, after review, the examiner interprets that this form of a suggestion to aid the user in developing a graphical program.

18. In regards to claim 32, Sojoodi states the processor is further operable to execute the program instructions to:

receive user input requesting to include a first suggested node in the graphical program (col. 17 lines 27-33 & Figure 7) [Referring now to FIG. 8, a flowchart illustrating steps taken to create and use a VISA virtual instrument are shown. A programmer "drags" a VISA session control from the Path and Refnum palette, as shown in FIG. 9a, and "drops" the control in a virtual instrument front panel. This "drag" and "drop" operation is performed by the user using a mouse or other pointing device, as is well known in

the art.]. The examiner interrupts that in the Figure 8 the user implements a drag and drop into the front panel of the graphical program, which is receiving the user input, and if the user needs assistants, Figure 7 illustrates a help palette, a help window is available for reference; and

include the first suggested node in the graphical program (col. 16 line 64 – col. 17 line 2) [Referring now to FIG. 7, a screen shot including a help screen illustrating the terminals of a VISA Write function node is shown. The VISA write node is illustrative of most VISA function nodes in that it has a VISA session input terminal, a dup VISA session output terminal, an error in input terminal, and an error out output terminal.]. The examiner interprets that providing a suggestion node in a help screen in a graphical program, the help screen contains information of the node's data input/output, after review, the examiner interprets that this form of a suggestion to aid the user in developing a graphical program.

19. In regards to claim 33, Sojoodi discloses displaying the one or more suggested nodes comprises displaying the one or more suggested nodes on a suggestion palette (col. 8 lines 59-61) [FIG. 7 is a screen shot illustrating the VISA functions palette including a help window illustrating the terminals of an exemplary VISA function node;].

20. In regards to claim 34, Sojoodi discloses a computer-implemented method for creating a graphical program, the method comprising:

displaying a graphical programming window for creating a graphical program (col. 11 lines 59-67) [Referring ahead briefly to FIG. 6, a screen shot of a graphical programming environment, according the present invention, including a VISA virtual instrument exemplary of the VI 50 of FIG. 3 is shown. The screen shot of FIG. 6 comprises an instrument front panel in a window in the upper portion of the screen and a block diagram in a window in the lower portion of the screen. The block diagram comprises program execution elements, referred to as nodes, which are wired together to produce a dataflow program.];

displaying one or more nodes in the window in response to user input (Figure 6). Referring to Figure 6, Sojoodi illustrated a graphical window that display multiple nodes that are linked together to create a program;

determining one or more suggested nodes in response to the user input (Figure 7); and displaying the one or more suggested nodes (Figure 7 and Figure 27) (col. 27 lines 24-28 & col. 16 line 64- col. 17 line 2) [The help window of FIG. 27 shows the terminals of a VISA attribute node. The VISA attribute node comprises a terminal for each of the attributes of the node. Some attributes are read-only and some attributes are both readable and writable.] [Referring now to FIG. 7, a screen shot including a help screen illustrating the terminals of a VISA Write function node is shown. The VISA write node is

illustrative of most VISA function nodes in that it has a VISA session input terminal, a dup VISA session output terminal, an error in input terminal, and an error out output terminal.].

21. In regards to claim 35, Sojoodi states a computer-implemented method for creating a graphical user interface for a graphical program, the method comprising:

displaying a window for creating the graphical user interface for the graphical program (col. 11 lines 59-67). [Referring ahead briefly to FIG. 6, a screen shot of a graphical programming environment, according the present invention, including a VISA virtual instrument exemplary of the VI 50 of FIG. 3 is shown. The screen shot of FIG. 6 comprises an instrument front panel in a window in the upper portion of the screen and a block diagram in a window in the lower portion of the screen. The block diagram comprises program execution elements, referred to as nodes, which are wired together to produce a dataflow program.]. The examiner interprets that in Figure 6 that the user has the ability to inserting the block element on to the screen, instead of programming the code. The user will put a sequence of blocks to together as demonstrated in the Figure 6, which are connected by wires, that will produce a graphical program;

displaying one or more user interface elements in the window in response to user input (col. 11 lines 59-67). [Referring ahead briefly to FIG. 6, a screen shot of a graphical programming environment, according the

present invention, including a VISA virtual instrument exemplary of the VI 50 of FIG. 3 is shown. The screen shot of FIG. 6 comprises an instrument front panel in a window in the upper portion of the screen and a block diagram in a window in the lower portion of the screen. The block diagram comprises program execution elements, referred to as nodes, which are wired together to produce a dataflow program.]. The examiner interprets that in Figure 6 that the user has the ability to inserting the block element on to the screen, instead of programming the code. The user will put a sequence of blocks to together as demonstrated in the Figure 6, which are connected by wires, that will produce a graphical program;

determining one or more suggested user interface elements in response to the user input (Figure 7); and

displaying the one or more suggested user interface elements (Figure 7 and Figure 27) (col. 27 lines 24-28 & col. 16 line 64- col. 17 line 2) [The help window of FIG. 27 shows the terminals of a VISA attribute node. The VISA attribute node comprises a terminal for each of the attributes of the node. Some attributes are read-only and some attributes are both readable and writable.] [Referring now to FIG. 7, a screen shot including a help screen illustrating the terminals of a VISA Write function node is shown. The VISA write node is illustrative of most VISA function nodes in that it has a VISA

session input terminal, a dup VISA session output terminal, an error in input terminal, and an error out output terminal.].

22. Claim 19 is substantially equivalent to claim 1, therefore claim 19 is rejected because of similar rationale.

23. Claim 20 is substantially equivalent to claim 2, therefore claim 20 is rejected because of similar rationale.

24. Claim 21 is substantially equivalent to claim 3, therefore claim 21 is rejected because of similar rationale.

25. Claim 22 is substantially equivalent to claim 5, therefore claim 22 is rejected because of similar rationale.

26. Claim 23 is substantially equivalent to claim 6, therefore claim 23 is rejected because of similar rationale.

27. Claim 24 is substantially equivalent to claim 8, therefore claim 24 is rejected because of similar rationale.

28. Claim 25 is substantially equivalent to claim 9, therefore claim 25 is rejected because of similar rationale.

29. Claim 26 is substantially equivalent to claim 10, therefore claim 26 is rejected because of similar rationale.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

> invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

30. Claim 11-16, 26-30, & 36-37 rejected under 35 U.S.C. 103(a) as being unpatentable over Sojoodi et al (U.S. Patent Number 5,784,275) in view of Choy et al (U.S. Patent Number 5,506,952).

In regards to claim 11, Sojoodi shows a graphical program editor that uses icons to represent functions of a program. The program is created by the user implementing dragging and dropping icons, which are located on a palette, on a whiteboard screen. The user arranges the icon is a systematic order to represent the entire functionality of the program being developed, this also illustrated to the programmer the data processing flow of the entire software being developed. The program also offer a help window, that aides the user in developing a efficient system. Sojoodi does not show a system that has the ability to give interactive suggestion to the user depending on the nodes that need to be complete.

Choy shows an interactive suggestion depending upon the user's input. Choy also discloses a graphical program that allows the user to create software. The graphical program is an expert system, which allows the user to create and modify icons

on the palette, with which the user drags and drops the icon from the palette to the whiteboard screen. After a rule is developed, or software is created the user has the ability add more components, or adjust existing rules. Icon palette will display only a certain number of icons depending upon the functionality or compatibility of the software being developed. The expert system guides the programmer to develop a more efficient system. Also, Choy states determining the one or more suggested nodes comprises determining that the one or more suggested nodes are necessary to complete an operation performed by the one or more nodes specified by the user input (col. 2 lines 13-22).

It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to add this expert system in Choy into Sojoodi's graphical program.

The modifications would have been obvious because one of ordinary skill in the art would have been motivated to combine the two systems, because there is a need for a method and an apparatus for guiding the construction of sequences of related elements and procedure for an expert system, which method and apparatus is simple and easy to operate for all users.

31. In regards to claim 12, Choy states performing an algorithm to determine the one or more suggested nodes based on the one or more nodes specified by the user input. (col. 5 lines 32-33 & col. 5 lines 46-48) [The method of FIG. 4E dynamically changes the palette 35 to display enabled and disabled icons.] [Task rules for an expert system are formed, modified, and

implemented from a workstation 13 by the main rule formation method of FIG. 4A.]. The examiner interprets that a expert system is algorithm based system, which has the ability to determine one or more suggestions by enabling and disabling icons on a palette.

32. In regards to claim 13, Choy states the algorithm is hard-coded to always determine the one or more suggested nodes in response to the one or more nodes specified by the user input. (col. 5 lines 32-33 & col. 5 lines 46-48) [The method of FIG. 4E dynamically changes the palette 35 to display enabled and disabled icons.] [Task rules for an expert system are formed, modified, and implemented from a workstation 13 by the main rule formation method of FIG. 4A.]. The examiner interprets that an expert system is algorithm-based system, which has the ability to determine one or more suggestions by enabling and disabling icons on a palette.

33. In regards to claim 14, Choy discloses the algorithm is operable to determine the one or more suggested nodes based on previously stored data regarding nodes that frequently occur in graphical programs along with the one or more nodes specified by the user input. (col. 2 lines 15-22) [enabling those components within the set of components for selection for insertion into the formative instruction and disabling those components of the set of components not included within the selection of components, so that the disabled components cannot be selected for insertion into the formative instruction. The disabled components are so

indicated by reducing the visibility of those identifying icons that are associated with the disabled components.]

34. In regards to claim 15, Choy states determining the one or more suggested nodes comprises determining that the one or more suggested nodes frequently appear in graphical programs that include the one or more specified nodes (col. 5 lines 32-33) [The method of FIG. 4E dynamically changes the palette 35 to display enabled and disabled icons.]. The examiner notes that in Figure 4e the icons that are being suggested are frequently appear in the graphical programs.

35. In regards to claim 16, Choy discloses determining the one or more suggested nodes comprises performing an artificial intelligence heuristic to determine the one or more suggested nodes based on the one or more nodes specified by the user input. (col. 5 lines 46-48). [Task rules for an expert system are formed, modified, and implemented from a workstation 13 by the main rule formation method of FIG. 4A.]. The examiner interprets that an expert system is a system that has artificial intelligence to make suggestion for the user throughout the program.

36. In regards to claim 36, Choy discloses a computer-implemented method for creating a script, the method comprising:

receiving user input specifying one or more steps to include in the script (col. 5 lines 13-25 & Figure 3) [The selection limitation of icons on the palette for proper rule construction can be observed in FIG. 3. Each icon 33 that may properly be inserted into the rule is

easily visible, while icons 33 that would cause the formation of an invalid rule are "grayed" out and are much less visible than proper icons 33. "Grayed" out icons 33 cannot be selected for insertion into the rule. In FIG. 3, the printer icon 49 is the last icon of the rule 40. After an icon 33 is located and released on the notebook page 37, the palette 35 changes to display selection limitations.];

including the one or more specified steps in the script script (col. 5 lines 13-25 & Figure 3) [The selection limitation of icons on the palette for proper rule construction can be observed in FIG. 3. Each icon 33 that may properly be inserted into the rule is easily visible, while icons 33 that would cause the formation of an invalid rule are "grayed" out and are much less visible than proper icons 33. "Grayed" out icons 33 cannot be selected for insertion into the rule. In FIG. 3, the printer icon 49 is the last icon of the rule 40. After an icon 33 is located and released on the notebook page 37, the palette 35 changes to display selection limitations.]; and

providing one or more suggested steps to include in the script, based on the one or more steps specified by the user input. script (col. 5 lines 13-25 & Figure 3) [The selection limitation of icons on the palette for proper rule construction can be observed in FIG. 3. Each icon 33 that may

properly be inserted into the rule is easily visible, while icons 33 that would cause the formation of an invalid rule are "grayed" out and are much less visible than proper icons 33. "Grayed" out icons 33 cannot be selected for insertion into the rule. In FIG. 3, the printer icon 49 is the last icon of the rule 40. After an icon 33 is located and released on the notebook page 37, the palette 35 changes to display selection limitations.]

37. In regards to claim 37, Choy states the steps comprise image processing steps (Figure 3); and the script is operable to perform an image processing process (Figure 3 & col. 5 lines 15-17) [Each icon 33 that may properly be inserted into the rule is easily visible, while icons 33 that would cause the formation of an invalid rule are "grayed" out and are much less visible than proper icons 33.].

Claim 27 is substantially equivalent to claim 11, therefore claim 27 is rejected because of similar rationale.

Claim 28 is substantially equivalent to claim 12, therefore claim 28 is rejected because of similar rationale.

Claim 29 is substantially equivalent to claim 15, therefore claim 29 is rejected because of similar rationale.

Claim 30 is substantially equivalent to claim 16, therefore claim 20 is rejected because of similar rationale.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to O'Neal R Mistry whose telephone number is (703) 305-2738. The examiner can normally be reached on 9am - 6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W Cabeca can be reached on (703)308-3116. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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